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Remarks

Claims 1-14 are currently pending. Claims 1-2 and 6-12 have been amended

Claim 1 stands rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the written description requirement. Specifically, the recitation of "*A single-step or multi-step process for the preparation of a compound of formula (XI)...*" was objected to. Applicants have amended claim 1 by deleting the words "*single-step or multi-step*" from the claim. Claim 12 was rejected as allegedly failing to comply with the written description requirement as the phrase "*reductive amination*" was thought to be an alternate to "*reductive alkylation*". Applicant has amended claim 12 to replace "*reductive amination*" with "*reductive alkylation*".

Accordingly, Applicants respectfully submit the rejections under 35 U.S.C. § 112, first paragraph, have been overcome.

Claim 1 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being incomplete for omitting essential steps. Applicants respectfully submit that the only essential step of the process set forth in claim 1 is the copper-mediated aryl amination. The basis of the invention described in the present application is the realization by the inventors that a complicated organic molecule of formula (XI) can be made by disconnecting the bond between the  $-NR^1$  group and the  $Ar^2-$  group and that these groups could be joined in the reverse sense by a copper-mediated aryl amination reaction between a fragment of formula  $YNR^1$  and a fragment of formula  $Ar^2X$ . Previous syntheses have lacked this crucial step and, as such, have been inferior in efficiency and selectivity. Having made this crucial realization, which is both novel and unobvious, it is possible to imagine many syntheses of a compound of formula (XI) in which the crucial copper-mediated aryl amination is performed early in the sequence using X and Y groups which are not fully formed and which must subsequently be elaborated or late in the synthesis with fully formed or almost fully formed X and Y groups. Accordingly, Applicants respectfully submit that the scope of claim 1 is justified.

Claims 2, 6, 7, 8, 9, 10, and 11 stand rejected under 35 U.S.C. § 112, second paragraph, for allegedly lacking sufficient antecedent basis in claim 1 for the limitations in each of those dependent claims. Applicants have amended claim 2 to read "*a process as claimed in claim 1 wherein the copper-mediated aryl amination is carried out by treating a compound of formula*

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(II) ...with a compound of formula (III) ...to give a compound of formula (IV) ...". The antecedent basis is now clear in that more specific steps are defined in claim 2 for carrying out the copper-mediate aryl amination, which is the essential feature of claim 1. Further basis may be found in the structures of formulas (II), (III), and (IV) which clearly read on to fragments of formula (XI) in claim 1. Applicants have amended claims 6, 7, 8, 9, 10, and 11 thereby overcoming the rejection for lack of antecedent basis.

Claim 13 was objected to under 37 C.F.R. § 1.75, as allegedly being a substantial duplicate of claim 2. Applicant respectfully submits that this is not the case. Claim 13 defines a process for making a compound of formula (IV) whereas claim 2, being dependent on claim 1, claims a process for making a compound of formula (XI) which incorporates the process of claim 13. Accordingly, Applicants respectfully submit that the claims are for processes for making different compounds and are clearly not duplicative.

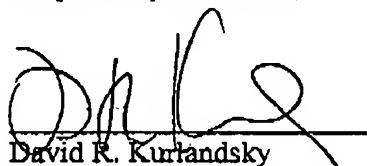
Applicants acknowledge the statement in the Office Action that claim 14 appears to be allowable over the prior art of record.

In view of the present amendment and foregoing remarks, reconsideration of the objection and advancement of the case to issue are respectfully requested.

The Commissioner is authorized to charge any fee or credit any over payment in connection with this communication to our Deposit Account No. 23-0455.

Respectfully submitted,

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